

# Mineral Industry Surveys

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## LEAD IN JANUARY 2006

Domestic mine production, based on the net quantity of lead recovered from concentrate, was 36,800 metric tons (t) in January, according to the U.S. Geological Survey. This was a decrease of 3% compared with production in December 2005 and an increase of 18% compared with production in January 2005. Secondary refined lead production (90,000 t) decreased about 3% compared with that in the previous month, and reported consumption (124,000 t) increased 2% compared with that in December. When compared with that of January 2005, secondary production was down by 5% and reported consumption was up by 2%.

According to Platts Metals Week published quotations, the average January North American producer price increased about 5% from that in the previous month to 68.30 cents per pound and was also about 13% higher than the January 2005 price.

In India, reports indicated that the economy continued to make significant progress (about 7.5% growth) with an expanding automobile population the basis for growing Indian lead demand. Passenger vehicle sales in 2005 were above 1 million units for a second consecutive year. International Lead Zinc Study Group data showed Indian lead consumption as increasing at a similar rate to the economy in general. The additional 50,000 metric tons per year of capacity at Hindustan Zinc Ltd.'s Chanderiya lead smelter, scheduled to come online this spring, may mean a temporary lessening of lead imports (CRU Lead Monitor, 2006a).

In China, reported refined lead production for 2005 exceeded 2 million metric tons. The battery sector remained the center point of strong lead demand with both domestic production and

sales of cars and trucks in 2005 exceeding 5.5 million units, with growth of 10% and 12% respectively. Motorcycle production and sales also grew sharply, both rising by more than 5% to 17 million units (CRU Lead Monitor, 2006b).

Red Dragon Zincorp, a subsidiary of Red Dragon Resources Ltd. (Vancouver, British Columbia, Canada), announced that it had entered into a joint venture with Tibet Baoming Industry and Trade Co. (China). The companies were expected to conduct an exploration program on the Weixi lead-zinc project, located in Yunnan Province, China. Mineralization was known to extend for at least 2 kilometers along the strike zone (CRU Lead Monitor, 2000d).

The National Defense Stockpile aggregated cash disposal (sale) of lead in January, under the Basic Ordering Agreement DLA-Lead-005, was 5,762 t, with an approximate value of \$7.5 million. Estimated to have dwindled to 12,000 t at the end of 2005, the stockpile began disposing of its strategic lead stockpile in 1993, when it held 545,000 t of lead (CRU Lead Monitor, 2006c).

## References Cited

- CRU Lead Monitor, 2006a, Chanderiya expansion to only bring a brief slowing to Indian lead imports: CRU Lead Monitor, February, p. 6.
- CRU Lead Monitor, 2006b, Chinese lead production continues to set new highs: CRU Lead Monitor, February, p. 6-7.
- CRU Lead Monitor, 2006c, Company news: CRU Lead Monitor, February, p. 8.
- CRU Lead Monitor, 2006d, Mine news: CRU Lead Monitor, February, p. 7-8.

TABLE 1  
SALIENT LEAD STATISTICS IN THE UNITED STATES<sup>1</sup>

(Metric tons, lead content, unless otherwise specified)

|  | 2004      | 2005                 |          |                      | 2006<br>January |
|--|-----------|----------------------|----------|----------------------|-----------------|
|  |           | January              | December | January-<br>December |                 |
| Production:  |           |                      |          |                      |                 |
| Mine (recoverable)   | 430,000   | 31,100 <sup>r</sup>  | 37,900   | 430,000              | 36,800          |
| Primary refinery   | NA        | NA                   | NA       | NA                   | NA              |
| Secondary refinery:  |           |                      |          |                      |                 |
| Reported by smelters/refineries                                    | 1,120,000 | 92,200 <sup>r</sup>  | 90,200   | 1,110,000            | 87,900          |
| Estimated  | 11,300    | 932 <sup>r</sup>     | 911      | 11,200               | 888             |
| Recovered from copper-base scrap <sup>e</sup>                      | 15,000    | 1,250                | 1,250    | 15,000               | 1,250           |
| Total secondary  | 1,140,000 | 94,400 <sup>r</sup>  | 92,400   | 1,140,000            | 90,000          |
| Stocks, end of period:   |           |                      |          |                      |                 |
| Primary refineries   | NA        | NA                   | NA       | NA                   | NA              |
| Secondary smelters and consumers                                   | 66,100    | 66,500 <sup>r</sup>  | 61,400   | 61,400               | 59,300          |
| Imports for consumption:   |           |                      |          |                      |                 |
| Ore and concentrate  | 3         | -- <sup>r</sup>      | --       | 29                   | NA              |
| Refined metal  | 197,000   | -- <sup>r</sup>      | 25,400   | 298,000              | NA              |
| Consumption:   |           |                      |          |                      |                 |
| Reported   | 1,480,000 | 122,000 <sup>r</sup> | 122,000  | 1,460,000            | 124,000         |
| Undistributed <sup>e</sup>   | 45,700    | 3,760 <sup>r</sup>   | 3,780    | 45,300               | 3,830           |
| Total  | 1,520,000 | 125,000 <sup>r</sup> | 126,000  | 1,510,000            | 128,000         |
| Exports:   |           |                      |          |                      |                 |
| Ore and concentrate  | 292,000   | 12,300               | 11,500   | 390,000              | NA              |
| Bullion  | 129       | 24                   | 23       | 198                  | NA              |
| Wrought and unwrought lead   | 82,400    | 7,330                | 7,400    | 64,600               | NA              |
| TEL/TML preparations, based on lead compounds                      | 1,020     | 117                  | 30       | 1,270                | NA              |
| Exports (gross weight): Scrap                                      | 56,300    | 4,410                | 5,110    | 67,300               | NA              |
| Platts Metals Week North American producer price (cents per pound) | 55.14     | 60.66                | 64.78    | 61.03                | 68.30           |

<sup>e</sup>Estimated. <sup>r</sup>Revised. NA Not available. -- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits, except prices; may not add to totals shown.

TABLE 2  
MONTHLY AVERAGE LEAD PRICES

|          | North American<br>producer price<br>cents/lb | LME           |              | Sterling<br>exchange rate<br>dollars/£ |
|----------|--|---------------|--------------|--|
|          |  | \$/metric ton | £/metric ton |  |
| 2005:    |  |               |              |  |
| October  | 60.82  | 1,004.17      | 568.91       | 1.765090                               |
| November | 60.86  | 1,017.91      | 586.72       | 1.734910                               |
| December | 64.78  | 1,123.51      | 643.55       | 1.745805                               |
| Year     | 61.03  | 975.98        | 537.10       | 1.817133                               |
| 2006:    |  |               |              |  |
| January  | 68.30  | 1,255.70      | 710.00       | 1.768590                               |

Source: Platts Metals Week.

TABLE 3  
CONSUMPTION OF PURCHASED LEAD-BASE SCRAP<sup>1</sup>

(Metric tons, gross weight)

| Item                                | Stocks<br>December 31, | Net      | Consumption | Stocks<br>January 31, |
|-------------------------------------|------------------------|----------|-------------|-----------------------|
|                                     | 2005                   | receipts |             | 2006                  |
| Battery-lead                        | 19,900                 | 85,300   | 85,400      | 19,800                |
| Soft lead                           | W                      | W        | W           | W                     |
| Drosses and residues                | W                      | W        | W           | W                     |
| Other <sup>2</sup>                  | 3,480 <sup>r</sup>     | 3,940    | 3,950       | 3,470                 |
| Total                               | 23,400 <sup>r</sup>    | 89,200   | 89,300      | 23,300                |
| Percent change from preceding month | XX                     | -2.7     | -1.8        | -16.7                 |

<sup>r</sup>Revised. W Withheld to avoid disclosing company proprietary data; included with "Other." XX Not applicable.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes solder, common babbitt, antimonial lead, cable covering, type metals, and other lead-base scrap not elsewhere classified.

TABLE 4  
LEAD, TIN, AND ANTIMONY RECOVERED FROM  
LEAD-BASE SCRAP IN JANUARY 2006<sup>1</sup>

(Metric tons)

| Product recovered     | Secondary metal content |     |          |
|-----------------------|-------------------------|-----|----------|
|                       | Lead                    | Tin | Antimony |
| Soft and calcium lead | 65,300                  | --  | --       |
| Remelt lead           | W                       | --  | --       |
| Antimonial lead       | 21,500                  | (2) | (2)      |
| Other <sup>3</sup>    | 1,170                   | (2) | (2)      |
| Total lead-base       | 87,900                  | 139 | 265      |

W Withheld to avoid disclosing company proprietary data; included in "Other."  
-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Withheld to avoid disclosing company proprietary data; included in "Total."

<sup>3</sup>Includes cable lead, lead-base babbitt, solder, type metals, and other products.

TABLE 5  
CONSUMPTION OF LEAD IN THE UNITED STATES<sup>1</sup>

(Metric tons, lead content)

| Use  | 2004      | 2005     |          | January -<br>December | 2006<br>January |
|--|-----------|----------|----------|-----------------------|-----------------|
|  |           | November | December |                       |                 |
| Metal products:  |           |          |          |                       |                 |
| Ammunition, shot and bullets   | 61,500    | 4,850    | 4,850    | 60,000                | 6,560           |
| Brass and bronze, billet and ingots  | 4,190     | 372      | 337      | 3,700                 | 384             |
| Cable covering, power and communication<br>and cabling lead, building construction | 5,540     | 467      | 547      | 6,840                 | 464             |
| Casting metals   | 17,900    | 1,490    | 1,500    | 17,900                | 1,520           |
| Sheet lead, pipes, traps and other extruded products                               | 32,400    | 2,730    | 2,680    | 32,700                | 2,630           |
| Solder   | 7,440     | 533      | 518      | 7,130                 | 661             |
| Storage batteries, including oxides  | 1,290,000 | 107,000  | 107,000  | 1,280,000             | 107,000         |
| Terne metal, type metal, and other metal products <sup>2</sup>                     | 1,770     | 185      | 185      | 2,210                 | 204             |
| Total metal products   | 1,420,000 | 117,000  | 118,000  | 1,410,000             | 119,000         |
| Other oxides and miscellaneous   | 59,600    | 4,650    | 4,640    | 56,400                | 4,580           |
| Total reported   | 1,480,000 | 122,000  | 122,000  | 1,460,000             | 124,000         |
| Undistributed <sup>c</sup>   | 45,700    | 3,770    | 3,780    | 45,300                | 3,830           |
| Grand total  | 1,520,000 | 126,000  | 126,000  | 1,510,000             | 128,000         |

<sup>c</sup>Estimated.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

<sup>2</sup>Includes lead consumed in foil, collapsible tubes, annealing, plating, galvanizing, and fishing weights.

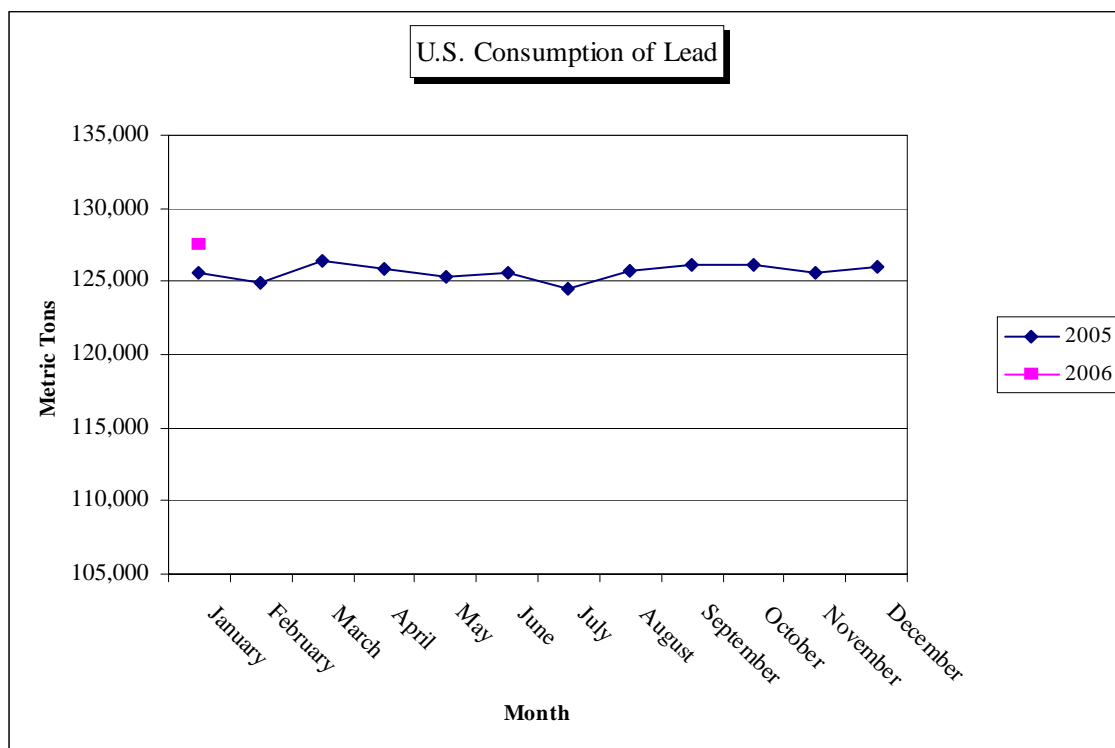


TABLE 6  
CONSUMER AND SECONDARY SMELTER STOCKS, RECEIPTS,  
AND CONSUMPTION OF LEAD<sup>1</sup>

(Metric tons, lead content)

| Type of material  | Stocks               | Net<br>receipts | Consumption | Stocks              |
|-------------------|----------------------|-----------------|-------------|---------------------|
|                   | December 31,<br>2005 |                 |             | January 31,<br>2006 |
| Soft lead         | 33,800 <sup>r</sup>  | 66,200          | 66,600      | 33,300              |
| Antimonial lead   | 11,500 <sup>r</sup>  | 35,300          | 36,900      | 9,840               |
| Lead alloys       | W                    | W               | W           | W                   |
| Copper-base scrap | W                    | W               | W           | W                   |
| Total             | 61,400               | 121,000         | 123,000     | 59,300              |

<sup>r</sup>Revised. W Withheld to avoid disclosing company proprietary data; included in "Total."

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 7  
U.S. EXPORTS OF LEAD, BY CLASS<sup>1</sup>

(Metric tons)

|  | 2004     |         | 2005     |          |                       |
|--|----------|---------|----------|----------|-----------------------|
|  | December | Year    | November | December | January -<br>December |
| Lead content:                                    |          |         |          |          |                       |
| Ore and concentrates                             | 12,600   | 292,000 | 19,400   | 11,500   | 390,000               |
| Bullion  | 5        | 129     | 34       | 23       | 198                   |
| Materials excluding scrap                        | 5,680    | 82,400  | 8,140    | 7,400    | 64,600                |
| TEL/TML preparations, based<br>on lead compounds | 298      | 1,020   | 5        | 30       | 1,270                 |
| Total  | 18,600   | 375,000 | 27,600   | 18,900   | 456,000               |
| Gross weight: Scrap                              | 5,160    | 56,300  | 5,650    | 5,110    | 67,300                |

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 8  
U.S. IMPORTS OF LEAD BY TYPE OF MATERIALS AND BY COUNTRY OF ORIGIN<sup>1</sup>

(Metric tons, lead content)

| Country of origin | General imports |          |          |                       | Imports for consumption |          |          |                       |
|-------------------|-----------------|----------|----------|-----------------------|-------------------------|----------|----------|-----------------------|
|                   | 2005            |          |          |                       | 2005                    |          |          |                       |
|                   | 2004            | November | December | January -<br>December | 2004                    | November | December | January -<br>December |
| Base bullion:     |                 |          |          |                       |                         |          |          |                       |
| Canada            | --              | --       | --       | 18                    | --                      | --       | --       | 18                    |
| Mexico            | 3               | --       | --       | --                    | 3                       | --       | --       | --                    |
| Other             | --              | --       | --       | 10                    | --                      | --       | --       | 10                    |
| Total             | 3               | --       | --       | 29                    | 3                       | --       | --       | 29                    |
| Pigs and bars:    |                 |          |          |                       |                         |          |          |                       |
| Australia         | --              | 500      | --       | 19,300                | 13,700                  | 626      | --       | 39,600                |
| Canada            | 166,000         | 21,000   | 18,700   | 190,000               | 166,000                 | 21,000   | 18,700   | 190,000               |
| Mexico            | 8,810           | 1,080    | 1,070    | 15,200                | 8,810                   | 1,080    | 1,070    | 15,200                |
| Peru              | 7,270           | 4,890    | 1,510    | 23,900                | 7,270                   | 4,890    | 1,510    | 23,900                |
| Other             | 1,310           | 236      | 4,110    | 28,300                | 1,450                   | 838      | 4,110    | 29,000                |
| Total             | 183,000         | 27,700   | 25,400   | 277,000               | 197,000                 | 28,400   | 25,400   | 298,000               |
| Grand total       | 183,000         | 27,700   | 25,400   | 277,000               | 197,000                 | 28,400   | 25,400   | 298,000               |

-- Zero.

<sup>1</sup>Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.